

WEATHER
RAINFALL
CALIFORNIA, U.S.
1850-1900

Weather Has

Always Varied

"Something's happening to the weather," the old-timers will assure you morosely. "It's not like it used to be back in the good old days. Why, when I was a child, the weather was perfect—not too much rain, not too little. It was r-e-a-l California weather then!"

Well, maybe . . .

Take the year 1849-1850. They had a rainfall of 33.10 inches. "It's too wet!" people complained.

But in 1850-51 there was only 7.40 inches of rain. "Awful, awful!" people mumbled. "Not enough rain!"

One hundred years ago in 1851-52, when the Town of Oakland received its charter, there was a rainfall of 35.26 inches. "Never saw anything like it!" people agreed.

Oakland's weather has always been variable, sometimes good, sometimes bad. Take the year 1861-62, for instance. That year, they had 49.27 inches—a little more than four feet of water pouring from the heavens. It was a record-breaking year for free moisture.

Last year, 1950-51, was 21.70.

This season, 1951-52, the weather has really been extraordinary.

Just now, a fellow was talking about it. "I tell you, the weather's changing," he insisted. "Back in the good old days, the weather was perfect. Yes, sir, it was r-e-a-l California weather then!"

Weather Records 98 Years Old Reveal It Was Really 'Unusual' Last Month

By GLADYS WILLIAMSON

CENTERVILLE, Feb. 19.—That really was "unusually unusual" weather in Alameda County last month.

Records, musty and yellow with age, have been discovered here to substantiate the claims of California climate boosters. These statistics, in the possession of E. M. (Matt) Mathiesen, local weather hobbyist, date back to 1849.

Believed to be the oldest weather records in Alameda County, the recordings are complete for a 98-year period with the exception of a dozen "missing" years.

Kept by a succession of amateur weather observers in Washington Township, entries regarding rainfall "seem to be correct" after a check with those maintained in Oakland and San Francisco.

OLDER THAN CHABOT

Prof. Earle G. Linsley of Chabot Observatory in Oakland, where official records date back to 1882—more than 30 years later than the local ones—and E. E. Eklund, in charge of the Weather Bureau climatological department in San Francisco, have studied the entries and confirmed their accuracy.

Few "phenominally dry" years are listed over the course of almost a century the local records have been kept. The lightest rainfall occurred in the 1850-1851 season, when there was only 4.71 inches.

The source of the original recordings remains a mystery.

The earliest known Washington Township weather man was William Barry, who came to the township from his native Ireland in 1852 and moved to Niles in 1869.

PURCHASED GAUGE

He set himself up as a self-appointed weather man for local farmers in 1885 when he purchased a rain gauge.

Among the documents he handed down is one titled "Fifty Years of Phenominal Rainfall," but he does not explain the source of the information prior to 1885. The earlier entries are in his handwriting, indicating that he copied the records of an earlier weather observer.

At one time Barry was secretary of the Alameda County Horticultural Commission and for many years raised herbs and rare plants on his 15-acre ranch on the Niles-Centerville road.

When Barry died in 1908, his sister, Elizabeth Anne, took over the work and continued until 1931, when she transferred her brother's instruments and records to Mathiesen. Miss Barry died in 1933. At one time she was matron of Orient Chapter, Order of the Eastern Star.

Interspersed in the ledgers, where

HERE ARE THE WET AND DRY YEARS OF THE PAST CENTURY

CENTERVILLE, Feb. 17.—The wettest and driest years in Washington Township, as shown in old records found here, are:

WET SEASONS		DRY SEASONS	
Year	Inches	Year	Inches
1849-50	36.00	1850-51	4.71
1852-53	36.36	1856-57	10.46
1861-63	36.10	1862-63	7.79
1867-68	32.79	1870-71	8.47
1885-86	32.27	1876-77	9.19
1889-90	35.91	1897-98	12.01
1894-95	27.30		

rainfall tabulations were entered, are personal notes and philosophies jotted down by Barry.

A study of the rainfall tables shows that only 11 times in the past 37 years has there been more than 20 inches of rainfall in a season.

But rainfall figures were not the only ones in which Barry was inter-

ested. Tom Robbins of Niles, another weather hobbyist, possesses records of temperatures kept by Barry and added to by Robbins.

These indicate the coldest January to be that of 1888, when on three days the mercury dropped to 26-28 degrees.

THIS YEAR COLDER

January, 1947, according to graphs kept by Robbins, was the longest sustained cold spell, when the temperature at 7 a.m. was above freezing only nine times during the month. It hit its low on January 17 when it registered 23 degrees.

Oldtimers remember "colder weather" though none can put a finger on the date or the thermometer reading. But, all agree that there has never been such a protracted cold spell as last month.

They remember that approximately 20 years ago the Alameda Creek in Niles Canyon froze from bank to bank and, 15 years ago, snow fell in Niles and stayed long enough to be photographed.

But ice in the chicken pans and snow on Mission Peak have always been front page news, local residents declare.

No, the climate isn't changing, and we can't even claim a record for wetness this month, with its 13 consecutive days of rain.

Back in January, 1909, during 26 days, 25 of them were rainy, with a consecutive period of 16 wet ones and a total rainfall of 10.62—"record breaker" of 61 years of observation conducted by Chabot Observatory.

This statement was made yesterday by Professor Earle G. Linsley, director of the observatory and professor of astronomy at Mills College, who admits that he "knows his rain." Three other Februarys thus far are ahead of 1936. Record-breaker is 1925, with 9.76 inches. Second is February, 1902, with 9.73. Third is 1904, with 9.45. Our own 1936 rainstorms of the month come in fourth with 7.95 inches—but another storm is on its way across the Pacific ocean, where most of the rains come from, according to Professor Linsley.

Several popular ideas are "debunked" by Chabot Observatory's rain expert, who measures the weather three times each day.

HIDDEN FORCES RULE

"No scientific method has been found for establishing a weather forecast two weeks ahead," he said. "Long range predictions belong to the future of science. No connection can be found between earth-weather and sun spots—sun spots represent storms in the sun's atmosphere. There is absolutely no evidence of a change in our climate. Wet years and dry years occur at chance intervals—which means that if there are definite physical laws behind them, they are as yet undiscovered. Only a long series of records, such as we are keeping, may help in revealing those hidden laws that govern our weather."

On the practical side, weather reports are of extreme importance not only to farmers but also to engineers and most of all as an aid to aviation, Professor Linsley said.

"Weather is a fascinating mystery, and remains so," he added. "Scientists have been working on it since the Tower of the Winds was erected in Athens, 1200 years ago, for observation purposes. Now we have new instruments but no answers. Sometime that answer will be found. That is what makes science the most fascinating occupation in the world—a cosmic detective story."

PROFESSIONAL PESSIMISTS

Reverting again to the practical, he revealed that official weather reports are purposely pessimistic.

"If rain is predicted, and there isn't any rain, nobody is hurt," he said. "If frost is predicted and there is no frost, preparations for frost have been made. That is why the Weather Bureau always looks on the dark side."

As to how you get those reports as to fractional inches of rain, he explained, this is how it is done at Chabot Observatory. First the rain is caught in a basin on the flat roof of the observatory. It then comes through a small pipe to a "tipping bucket rain gauge." Instantly, by electrical transmission, one-hundredth of an inch of rain makes a jiggle on a recording device two floors below. Clear weather makes a straight line, no jiggles. But if the electricity should fail, the rain can be measured directly in a jar below the tiny "tipping bucket." The jar, though 10 inches high, would mean one inch of rain if full. For lesser amounts, it is graduated for each hundredth of an inch.

"But don't mix up the record-

amounts, it is a hundredth of an inch.

"But don't mix up the recorders with the forecasters," Linsley added as a final warning. "The two sciences require different instruments and technique, though working in cooperation on the eternal enigma of the weather."

IN BAY AREA BUREAU

The United States Weather Bureau men who "take care" of storms for the Bay Region are Major Edward H. Bowie, Thomas Reed and R. C. Counts Jr. Their task is predicting weather as well as measuring the effects of the weather.

Major Bowie, who lives at 844 Contra Costa Avenue, Berkeley, has been "intimate" with the weather as a member of the bureau since 1891. He has covered the weather front for the Pacific States since 1924, with headquarters in San Francisco. Major Bowie likes to collect old weather proverbs, find scientific explanation for them.

Reed is a veteran of more than 20 years with the Weather Bureau, and is known officially as a forecaster. His home is at 1118 Milvia Street, Berkeley.

Counts, who also lives in Berkeley, at 1517 Ada Street, was stationed in Denver before he joined the San Francisco office in 1932.

Major Bowie compares his weather work to a "never ending game of chess." Professor Linsley prefers detective stories for his change in problems.

"I never knew an astronomer who didn't like detective stories," he added.
